INTERNATIONAL SEARCH REPORT

International application No.
T/JP03/03665

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl[7] C30B29/28, C09K11/80, C09K11/78

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl[7] C30B1/00-35/00, C09K11/80, C09K11/78

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAS ONLINE, WPI, JSTPlus(JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	N. GUERASSIMOVA et al., X-ray excited charge transfer luminescence of ytterbium-containing aluminium garnets., Chemical Physics Letters, 11 May, 2001 (11.05.01), No.339, pages 197 to 202, page 197, left column, line 1 to page 198, left column, line 36; page 198, right column, line 15 to page 201, left column, line 17	1-3
Y	US 5866092 A (MITSUBISHI GAS CHEMICAL CO., INC.), 02 February, 1999 (02.02.99), Claims 1 to 3 & JP 9-328396 A	1-3

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search 22 April, 2003 (22.04.03)	Date of mailing of the international search report 06 May, 2003 (06.05.03)
Name and mailing address of the ISA/ Japanese Patent Office Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.
T/JP03/03665

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	J.P. CHAMINADE et al., Crystal Growth and Optical Properties of New Neutron Detectors $Ce^{3+}:Li_6R(BO_3)_3$ (R=Gd, Y). IEEE Transactions on Nuclear Science, August 2001, Vol.48, No.4, pages 1158 to 1161, page 1159, left column, line 22 to page 1160, left column, line 30; page 1160, right column, line 30 to page 1161, right column, line 2	1,3
A	Akira YOSHIKAWA et al., $\{Y_{3-x}, Yb_x\}[Ga]_2(Ga)_3O_{12}$ and $\{Lu_2Yb_1\}[Al]_2(Al)_3O_{12}$ single crystals for scintillator application grown by the modified micro-pulling-down method. Nuclear Instruments and Methods in Physics Research, Section A, 21 June, 2002 (21.06.02), Vol.486, Nos. 1 to 2, pages 79 to 82	1-3
A	US 5057692 A (GENERAL ELECTRIC CO.), 15 October, 1991 (15.10.91), & JP 4-289483 A & EP 471926 A2	1-3